

SPECIAL SUPPLEMENT — 2008 MHS CONFERENCE



US DEPARTMENT OF DEFENSE PATIENT SAFETY PROGRAM NEWSLETTER



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A QUARTERLY NEWSLETTER TO ASSIST THE MILITARY HEALTH SYSTEM IMPROVE PATIENT SAFETY

2007 PATIENT SAFETY AWARDS

The tradition of innovation, improvement and excellence in the service of patient safety continues across the Military Health System (MHS). For the fifth year, the MHS Conference, scheduled for January 28–31 in Washington, D.C. will provide a system-wide venue for the presentation of the Department of Defense (DoD) Patient Safety Awards. These awards are an annual, public recognition of the day-to-day, ongoing efforts by military healthcare providers to create a culture of safety and quality within the MHS in response to the stated commitment of the DoD and the Patient Safety Program (PSP).

The focus of the 2008 MHS Conference is the MHS Strategic Plan. All conference presentations align with the plan's goals and objectives, many of which include actions steps aimed at achieving evidence-based healthcare, patient-centered care, and quality in all aspects of healthcare delivery. In keeping with the Conference focus, the 2007 Patient Safety Awards have honed in, as well, on initiatives that facilitate better meeting the needs of our patients.

The 2007 DoD Patient Safety Awards formally recognize efforts designed to improve the care delivered within the Military Health System. The awards celebrate those who have shown innovation and commitment to the development of systems and processes that are tightly organized around the needs of the patient. Categories for consideration include: Improvements to team performance; Use of technology to improve patient safety; Implementation of system changes or interventions to improve patient safety and/or meet national patient safety standards. By presenting these awards, DoD seeks to highlight and encourage efforts that create an environment where safe, quality care is provided and is acknowledged as the responsibility of all members of the team.

Recipients of the 2007 Patient Safety Awards are:

- **59th Medical Wing — Wilford Hall Medical Center — Lackland AFB, TX** (*Improvements to Team Performance*)
- **22nd Medical Group — McConnell AFB, KS** (*Implementation of System Changes or Interventions*)
- **US Naval Hospital Sigonella — Sicily, Italy** (*Implementation of System Changes or Interventions*)
- **49th Medical Group — Holloman AFB, NM** (*Use of Technology*)
- **Madigan Army Medical Center — Tacoma, WA** (*Use of Technology*)

Improvements to Team Performance

59th Medical Wing, Wilford Hall Medical Center, Lackland AFB, TX
Title: Nurse/Mental Health Technician
Change of Shift Safety Checks

The mental health unit team at Wilford Hall Medical Center implemented a simple but effective schedule of "safety checks" to reduce the likelihood of patient self-harm or suicide. Responding to the reality that suicide is the second most frequently reported sentinel event nationwide, the Wilford Hall team recognized that their current safety protocols could be reviewed and strengthened.

The team developed a structured safety check process designed to prevent patient self-harm or suicide by ensuring that harmful objects are identified and removed. The safety check is performed by

a nurse and mental health technician at each shift change. Any hazards or findings are immediately corrected and are communicated to the incoming team.

Data collected over six months of tracking the safety checks indicated that potential hazards, easily accessible to at-risk patients, did exist and. With each successive month of safety checks, however, fewer hazards were identified. Over the initial six month period of data collection, there was a seventy-five per cent (75%) reduction in the number of hazards found.

Providers in the Wilford Hall mental health unit have created a safer environment for their at-risk patients. By standardizing the safety check process they have addressed a perceived patient need; by utilizing a team approach they have assumed joint responsibility for the safety of their patients.

Implementation of System Changes or Interventions

22nd Medical Group, McConnell AFB, KS
Title: Revision of the Medication Renewal Process

The 22nd Medical Group designed an alternative process for responding to medication renewal calls which improved both efficiency and the quality of follow-up care for patients.

Concerned that nurses were spending too much duty time dealing with requests for medication renewal, a team was formed to find a better way to field calls. Their answer was consolidation of calls to a dedicated renewal line, open twenty-four hours a day, seven days a week. Technicians were specially selected and trained to

Continued on Back

Patient Safety Awards

Continued from Front

retrieve the messages. A Failure Mode and Effects Analysis of the new process was conducted prior to implementation. Relying on standardization and communication, the process has proven to be a success — nurses have been freed up for other duties, and the technician-generated telephone consults have provided adequate information for appropriate provider responses.

A welcome unintended consequence has been noted since inception of the alternative retrieval process — monitoring of patient follow-up has improved. In developing the new system, physicians approved standard monitoring guidelines for technicians to follow as they field renewal calls. When technicians identify a patient who has not had required lab work or follow-up within the specified time, they notify the patient of the need for further care and approve only a limited amount of medication until monitoring has been accomplished.

This award-winning system change, rooted in the team approach to identifying and implementing improvement, has impacted patient safety indirectly — nurses are off the telephone and back to patient-centered duties — and directly — with patients receiving enhanced follow-up management.

Implementation of System Changes or Interventions

US Naval Hospital Sigonella, Sicily, Italy

Title: Clinical Microsystems

By agreeing to serve as a pilot site for implementation of the Clinical Microsystems framework, under the supervision of the Center for Education and Research in Patient Safety (CERPS), US Naval Hospital Sigonella embraced a multi-faceted systems change. The parturient labor and delivery process was chosen as the focus of Clinical Microsystems scrutiny and application.

The team at Sigonella studied the labor and delivery clinical work environment and identified seven problematic processes: 1) underutilization of maternal fetal monitors; 2) loss of relative value units (RVUs); 3) delayed lab tests and treatment on admission; 4) same pumps used for intravenous and epidural infusions; 5) scheduling of elective Cesarean sections stressed ward staffing; 6) delay in starting elective Cesarean sections because of late lab work; 7) inefficient process for obtaining lab test results for after-hours surgical patients. Utili-

lizing the Clinical Microsystems framework, with the goal of ensuring that each patient interface is the most effective and productive possible, the team reflected on the people, patients, processes and patterns associated with each problem. They tailored these specific solutions: 1) use of fetal monitors has been expanded and enhanced; 2) capture of RVUs has increased 55%; 3) admission lab test results are available sooner, allowing treatment to begin without delay; 4) new dedicated epidural infusion pumps have increased patient safety and patient satisfaction; 5) elective Cesarean sections are scheduled to align with ward staffing; 6) pre-surgery lab work for elective Cesarean sections is now day the day before surgery, eliminating delays 7) point-of-care testing for after-hours surgical patients has improved the lab test and results process.

In addition to these discrete process improvements, providers at Sigonella cite more global rewards from their Microsystems experience. Working together as a team to improve their care delivery process has created a new sense of shared responsibility, has deepened morale, and has renewed their dedication to their mission of patient-centered care.

Use of Technology

49th Medical Group, Holloman AFB, NM

Title: Child Resistant Packaging

Technology to the rescue is an apt description of the award-winning technique the Pharmacy at Holloman AFB employed to address a startling potential patient safety problem. Told by a mother that her two-year old was able to open a medication bottle they dispensed (without harm, in this case) the Pharmacy staff initiated a review of their medication bottles to ensure they comply with standards for child-resistant packaging.

Working with a pediatrician, the Pharmacy designed two studies to test their medication bottles. In both studies, staff measured the time it took children to open the 49th Medical Group (MDG) bottles as opposed to the time needed to open a bottle from an outside vendor. The studies were conducted at the 49th MDG Pediatric Clinic and at the local Child Development Center.

Results from both studies demonstrated that the medicine bottles used at the 49th MDG did not meet the standards for child resistant packaging promulgated by the Consumer Product Safety Commission. While

only 38% of children were unable to open the MDG bottles, a full 98% could not open the vendor's bottle. Based on these results, the Pharmacy discontinued use of their bottles and switched to the vendor's bottles,

Taking responsibility for the safety of patients throughout the system, the 49th MDG Pharmacy has shared the information they uncovered through Air Force patient safety channels and as a product alert. Their vigilance and practical use of technology has served to ensure a safer environment for patients well beyond their own population.

Use of Technology

Madigan Army Medical Center,

Tacoma, Washington

Title: Development and Implementation of a Mobile Obstetric Emergencies Simulator

A recent report estimated that nearly 40% of all maternal deaths in the US could be avoided with better obstetric care during emergencies. Directly responding to this need, the Andersen Simulation Center at Madigan Army Medical Center developed the Mobile Obstetrics Emergencies Simulator.

Personnel train on the simulator to experience those very emergencies identified in the literature as the cause of the majority of poor outcomes – shoulder dystocia, breech vaginal delivery and postpartum hemorrhage. The simulator includes a full size birthing mannequin, a mobile cart showing vital signs, and a digital video system that allows for post-emergency review. Unique in its goal to combine simulation and TeamSTEPPS training, the simulator integrates high fidelity simulation training and a no-fault electronic debriefing system to evaluate and instruct in both the technical aspects of patient care and TeamSTEPPS training during emergencies.

Portable and inexpensive, the Mobile Obstetrics Emergencies Simulator has been replicated and shared with other DoD facilities. Currently in place at eight DoD sites, including Army, Navy and Air Force, in addition to Madigan AMC, the simulator is a technologically sophisticated, comprehensive response to a critical training need. Patient safety is well served across the MHS by Madigan's use of technology and teamwork to train providers to respond more effectively in emergent situations where competence and experience improves outcomes.